DODAF PRODUCT DEVELOPMENT QUESTIONNAIRE ANALYSIS REPORT AND NEW PRODUCT RECOMMENDATIONS REPORT

Arlington, VA
May 5, 2008
Version 4

Personnel and Readiness Information Management

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DoDAF V1.5 Product Development Questionnaire Analysis

Questionnaire Approach

The Department of Defense (DoD) Architecture Framework (AF) Product Development Questionnaire was designed to collect enterprise architecture (EA) product information from the Services, Defense Activities, DoD Agencies, OSD Offices, and government contractors developing enterprise architecture.

The softcopy version of questionnaire was accessible through the DoD Architecture Registry System (DARS) website and via email. Hard copy versions were distributed at the April 2008 Defense Enterprise Architecture Summit in Orlando, Florida and the April 7, 2008 Presentation Technical Working Group Full Membership meeting in Alexandria, Virginia. The target audience had 2 weeks, from April 7, 2008 to April 25, 2008, to complete the questionnaire.

Target Audience

The questionnaire's target audience was individuals responsible for managing EA product development activities. Their responses will serve as the basis for identifying which EA products defined by DoDAF V1.0 are most commonly developed and what types of supplementary products respondents create, if applicable. Refer to Appendix A: List of DoDAF V1.5 Products.

Respondents

Representatives from twenty-five (25) organizations were contacted to participate in the information gathering process. P-TWG team received 37 responses from 19 organizations, some of which were not in the original target audience contact list. As requested, some organizations, submitted a separate questionnaire response for each EA product development initiative managed by the organization.

The respondents were required to provide name, organization and contact information to complete the questionnaire in order to associate responses to each organization's representative. This helped the P-TWG team ensure each organization's activities were identified and documented, and provided a point of contact (POC) if additional information is required during the analysis. Refer to Appendix B: List of Participating Organizations and Projects by Organization Type.

Questionnaire Analysis and Findings

Overall Summary

The analysis of the DoDAF V1.5 Product Development Questionnaire has yielded these baseline findings:

- At least three quarters of the participating projects developed the OV-1 (92%), AV-1 (84%), OV-5 Node Tree (82%), AV-2 (79%), and OV-2 (76%). Refer to Appendix C: DoDAF Product Development Frequency – Most Commonly Developed Products.
- More that 70% of Air Force, Army, and Marine Corps projects develop the OV-1 (80%, 86%, and 100%, respectively) and the AV-2 (80%, 71%, and 100%, respectively). Refer to Appendix D: DoDAF Product Development Frequency by Service and Appendix E: DoDAF Product Development Frequency by Service and Product
- At least three quarters of the participating projects do not build the SV-7 (95%), SV-10b (92%), SV-9 (89%), SV-10a (89%), SV-11 (82%), OV-6b (76%), SV-5 (76%), SV-8 (76%), SV-10c (76%), and SV-4b (74%). Refer to Appendix F: DoDAF Product Development Frequency – Least Frequently Developed Products.
- Almost 30% of the participating projects build supplementary architecture products not included in/required by DoDAF 1.0 to satisfy their information needs or other requirements. Refer to Appendix G: "Other Product" Development Purpose/Source of Requirement.

Conclusion

The goal of the DoDAF V1.5 Product Development Questionnaire was to obtain a high-level view of the frequency of development of the existing DoDAF V1.5 products and additional informational needs of the organizations surveyed. Through the participation of the Services, Defense Activities , DoD Agencies, OSD Offices, and government contractors, the questionnaire provided and the P-TWG team analysis it was determined that none of the existing DoDAF V1.5 products can be eliminated. Though some are rarely used, research clearly shows that all products are currently developed, though at a different frequency, by the different organizations and initiatives.

New Product Findings and Recommendations

Approach

The Ministry of Defense Architecture Framework (MODAF) and the NATO Architecture Framework (NAF) were analyzed in comparison to DoDAF 1.5, with a particular focus on architecture development based on capabilities, programs, and services. It was necessary to consider alternate viewpoints in order to build upon what is currently within DoDAF 1.5, and continue developing a comprehensive framework. Below are the findings of the analysis, as well as recommendations for new views and products to add to DoDAF V2.0.

Findings

After analyzing these alternate architecture frameworks, it was determined that there are three key views that could add value to DoDAF V2.0: Capability, Program, and Service Oriented. The Strategic View in MODAF, similar to the Capability View in NAF, supports the process of analyzing and optimizing the delivery of capabilities. The Acquisition View in MODAF, similar to the Program View in NAF, describes the relationships between capability requirements and various programs and projects being implemented. The Service-Oriented View in NAF is a description of services needed to directly support the operational domain as described in the Operational View. Further analysis of the Service-Oriented View must be conducted before it is deemed a necessary addition to DoDAF V2.0.

Recommendations

In order to address capabilities, programs, and services, DoDAF V2.0 should consider expanding upon its current set of views by making the following additions:

***Temporary product and view names are generic and subject to change**

View Types	Recommended Products
Capability View	CV-1: Vision
	CV-2: Capability Taxonomy
	CV-3: Capability Phasing
	CV-4: Capability Dependencies
	CV-5: Capability to Organizational Deployment Mapping
	CV-6: Capability to Operational Activities Mapping
	CV-7: Capability to Services Mapping

View Types	Recommended Products
Program View	PV-1: Program Portfolio Relationships
	PV-2: Program Timelines
	PV-3: Program to Capability Mapping
Service-Oriented View	SOV-1: Service Taxonomy
	SOV-2: Service Definitions
	SOV-3: Service to Operational Activities Mapping
	SOV-4: Service Orchestration
	SOV-5: Service Behavior

Breakdown of Recommended Products

CV-1: Enterprise Vision

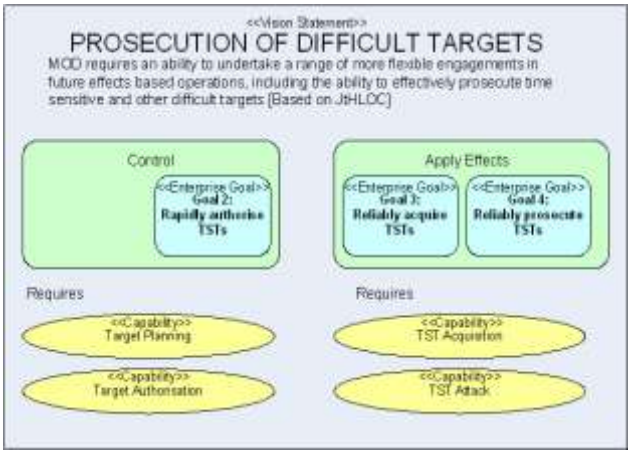
Purpose: The CV-1 addresses the enterprise concerns associated with the overall vision for transformational endeavors, provides a strategic context for the capabilities described in the Architecture, and provides a high-level scope for the Architecture which is more general than the scenario-based scope defined in an OV-1.

Uses: The CV-1 can be used for identification of capability requirements, capability planning (capability taxonomy), codifying required capability elements, capability audit, capability gap analysis, source for the derivation of cohesive sets of Key User Requirements (KUR), and providing reference capabilities for architectures.

Data Objects: The data in a CV-1 can include:

- Vision
- Goals
- Capability Phase
- Capability
- Activity

Graphic Example from MODAF:



CV-2: Capability Taxonomy

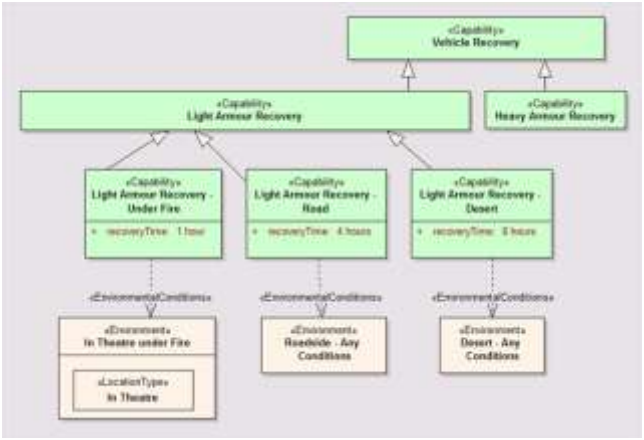
Purpose: The CV-2 presents a hierarchy of capabilities, specifies all the capabilities that are referenced throughout one or more architectures, and can be used as a source document for the development of high level use cases and KUR's.

Uses: The CV-2 can be used for identification of capability requirements, capability planning (capability taxonomy), codifying required capability elements, capability audit, capability gap analysis, source for the derivation of cohesive sets of KUR, and providing reference capabilities for architectures.

Data Objects: The data in a CV-2 can include:

- Capability
- Capability Specialization (relationship between capabilities)
- Capability Phase
- Capability Components

Graphic Example from MODAF:



CV-3: Capability Phasing

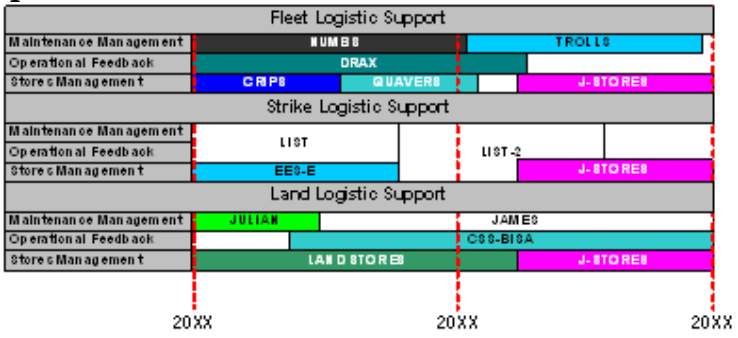
Purpose: The CV-3 addresses the planned achievement of capability at different points in time or during specific periods of time and supports the Capability Audit process and similar processes used across the different COIs by providing a method to identify gaps or duplication in capability provision.

Uses: The CV-3 can be used for capability planning (capability phasing), capability integration planning, and capability gap analysis.

Data Objects: The data in a CV-3 can include:

- Capability
- Performers
- Capability Increment (Project Milestone)
- Out of Service (Project Milestone)
- Capability Phase

Graphic Example from MODAF:



CV-4: Capability Dependencies

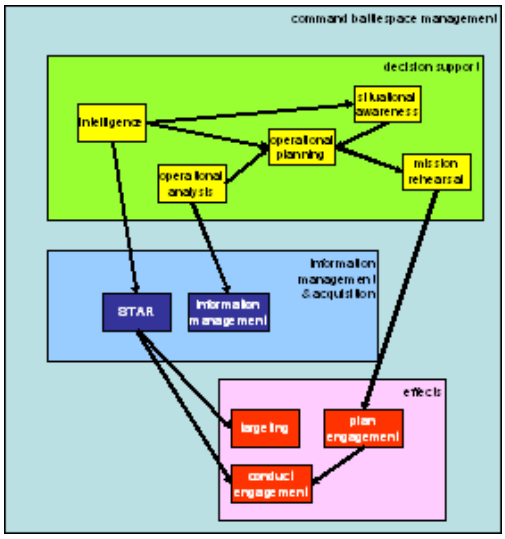
Purpose: The CV-4 describes the dependencies between planned capabilities and defines logical groupings of capabilities (capability clusters).

Uses: The CV-4 can be used for identification of capability dependencies, and capability management (impact analysis for options, disposal etc).

Data Objects: The data in a CV-4 can include:

- Capability
- Capability Dependency (relationship)
- Capability Composition (relationship)

Graphic Example:



CV-5: Capability to Organization Development Mapping

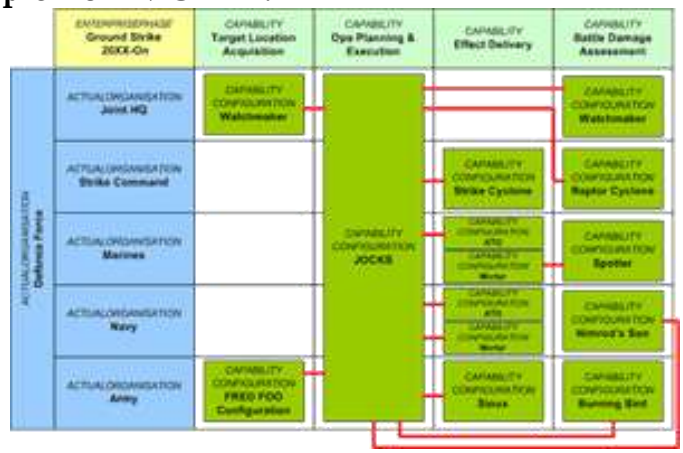
Purpose: The CV-5 addresses the fulfillment of capability requirements, in particular by network enabled capabilities, shows the planned capability deployment and interconnection for a particular Enterprise Phase, and will provide a more detailed dependency analysis than is possible using CV-3.

Uses: The CV-5 can be used for fielding planning, capability integration planning, capability options analysis, capability redundancy/overlap/gap analysis, and identification of deployment level shortfalls.

Data Objects: The data in a CV-5 can include:

- Capability
- Performers
- Resource Interaction (between Performers or their components)
- Actual Performer (Actual PersonType, Actual Organisation)
- Capability Delivery (Project Milestone)
- Capability No Longer Used (Project Milestone)

Graphical Example from MODAF:



CV-6: Operational Activity to Capability Mapping

Purpose: The CV-6 describes the mapping between the capabilities required by an Enterprise and the operational activities that those capabilities support, and identifies how operational activities can be performed using various available capability elements.

Uses: The CV-6 can be used for tracing capability requirements to enduring tasks and for capability audit.

Data Objects: The data in a CV-6 can include:

- Capability
- Activity

Graphical Example from MODAF:

	Information Acquisition	Information Management	Effects
Recce	X		
Collate Intelligence		X	
Conduct Estimate		X	
Coordinate Plan	X	X	X
Attack	X	X	X
Recuperate		X	

CV-7: Capability to Services Mapping

Purpose: The CV-7 describes the mapping between capabilities and the services that these capabilities enable.

Uses: A CV-7 shows which capabilities are required to be able to provide which services, or which services can be provided with a given set of capabilities. The mapping will be an aggregation of other DoDAF views. By combining CV-6 (maps capabilities to operational activities) with SOV-4 (maps operational activities to services), essentially a mapping between capabilities and services is obtained.

Data Objects: The data in a CV-7 can include:

- Capability
- Service (Operational, Information and Application service)

PV-1: Project Portfolio Relationships

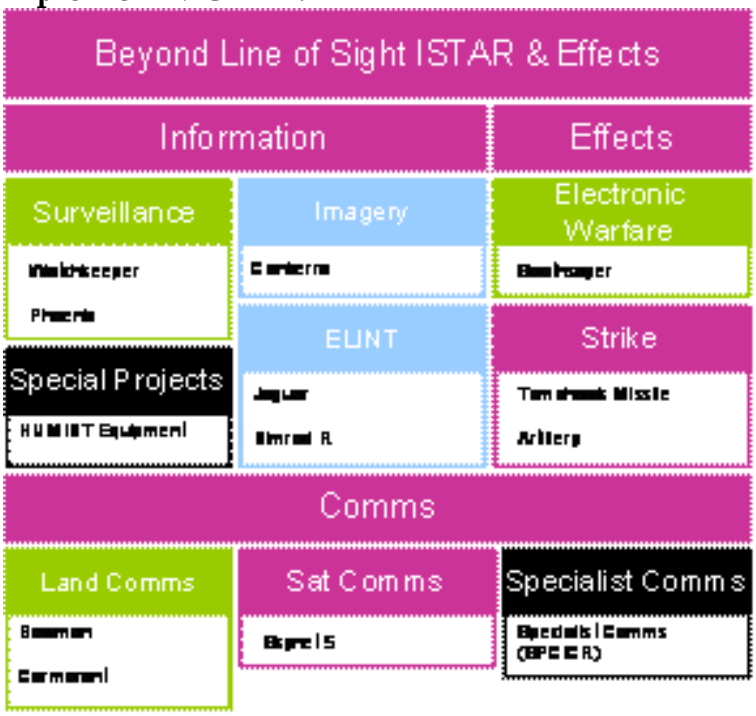
Purpose: The PV-1 represents an organizational perspective on programs, enables the user to model the organizational structures needed to manage a portfolio of projects, and shows dependency relationships between the actual organizations and projects.

Uses: The PV-1 can be used for program management (specified acquisition program structure) and project organization.

Data Objects: The data in a PV-1 can include:

- Project
- Project "Owning" Organization
- Project Phase

Graphical Example from MODAF:



PV-2: Project Timelines

Purpose: The PV-2 provides a timeline perspective on programs, and graphically displays the key milestones and interdependencies between the multiple projects that constitute a program.

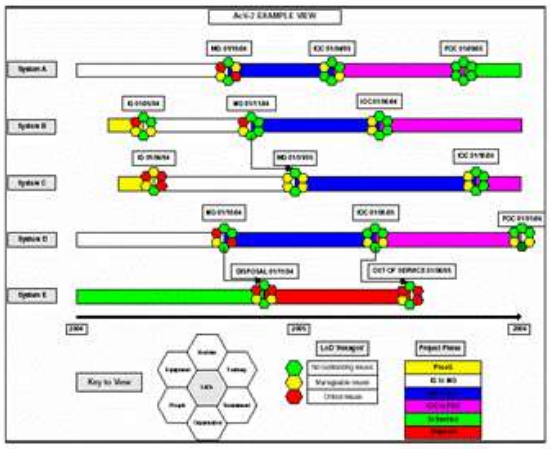
Uses: The PV-2 can be used for project management and control (including delivery timescales), project dependency risk identification, management of dependencies within a System of Systems (including all DOTMLPF), portfolio management (for System of Systems acquisition), and Through Life Management Planning (TLMP).

Data Objects: The data in a PV-2 can include:

- Projects

- Project Milestones
- DOTMLPF
- Project Dependencies

Graphic Example from MODAF:



PV-3: Project to Capability Mapping

Purpose: The PV-3 supports the acquisition and deployment processes, including the management of dependencies between projects and the integration of all relevant project and program elements to achieve a capability.

Uses: The NPV-2 maps programs and projects to capabilities to show how the specific projects and program elements help to achieve a NATO capability, as defined in a CP. Projects are mapped to the capability for a particular timeframe or epoch. Projects may contribute to multiple capabilities and may mature across time. This sub view analysis can be used to identify capability redundancies and shortfalls, highlight program phasing issues, expose organizational or system interoperability problems, and support program decisions, such as when to phase out a legacy system.

Data Objects: The data in a PV-3 can include:

- Capability

SOV-1: Service Taxonomy (Duplication of SvcV-3a, Services-Services Matrix)

Purpose: The SOV-1 organizes knowledge according to the service perspective, and facilitates harmonization of services across multiple domains (or across multiple architectures).

Uses: A taxonomy, essentially, is a system of classification. The general purpose is to organize one's knowledge of something into categories of similar things, in order to understand something better through comparison with other similar things. In the Service-Oriented View, the service taxonomy represents the operational domain's knowledge, as described in the Operational View, in terms of services, structured in some useful way. The services themselves are defined in SOV-2. For the taxonomy to be efficient and useful, it needs to classify services according to some classification criterion. This criterion should reflect the purpose of the taxonomy itself. For example, if the purpose is to reduce design complexity, then services could be classified according to architecture aspects, views, perspectives or levels of abstraction, if these are the mechanisms used to reduce complexity (e.g. distinguishing application services from infrastructure services). If the purpose is to support program management, then services could be classified according to organizational aspects (e.g. distinguishing functional services from core services). Criteria of purpose may also be combined (e.g. resulting in, using the previous two examples, functional application services and core infrastructure services).

Data Objects: The data in an SOV-1 can include:

- Service (Operational, Information and Application service)

Graphic Example from NAF:

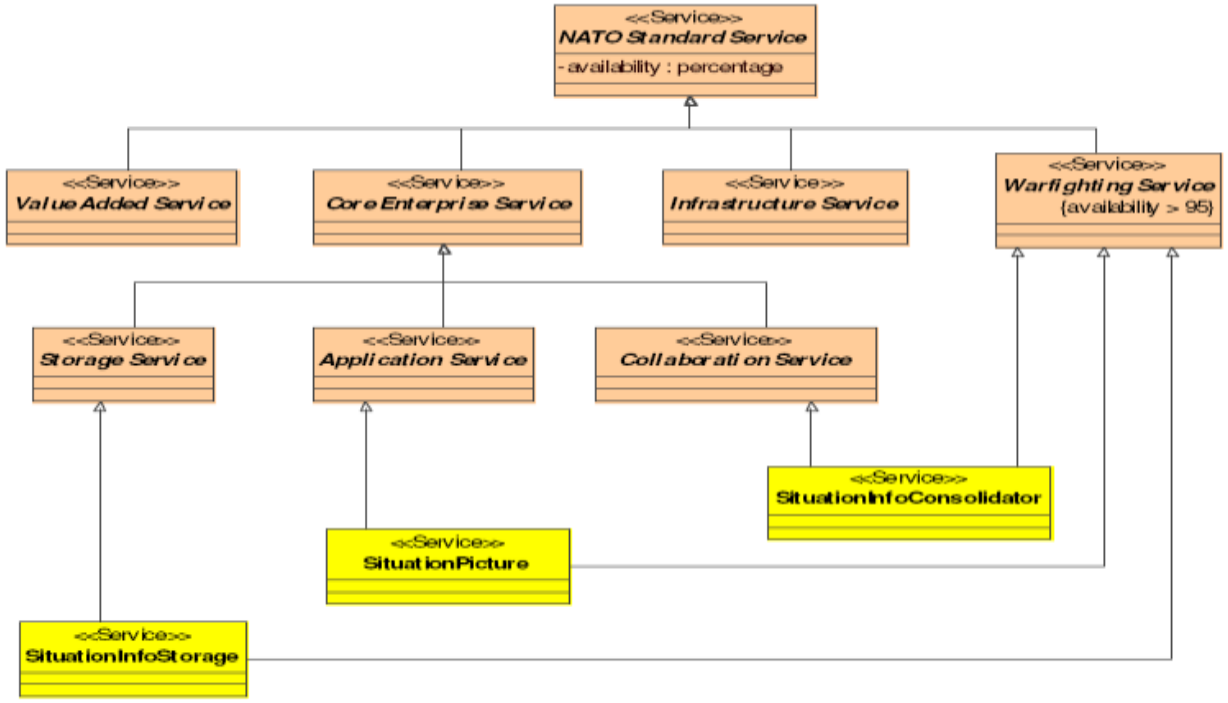


Figure 4-17, Example of a service taxonomy

SOV-2: Service Definitions ***(Duplication of SvcV-4 Services Functionality Description)***

Purpose: The SOV-2 strictly delineates and defines services in order to understand the operational domain in terms of services supporting operational activities.

Uses: A definition of a service is broken apart into distinct segments:

> **Service effect**: defining the intended real world effects or information provided by the service;
> **Service identification**: identifying and uniquely naming a service; describing the set of functionality offered and the information consumed and provided;
> **Service properties**: identifying specific properties of a service that may differ from one instance or implementation of a service to another. This includes quality of service properties, such as performance, security,

availability, reliability, maintainability, latency, confidentiality, and integrity.
Service interfaces: specifying the interfaces through which the service consumer may exchange information with this service;
Service policies: specifying the policies regarding security, commercial conditions, applicable laws, etcetera, under which the service is provided.

Data Objects: The data in an SOV-2 can include:

- Performer
- Information object
- Information requirement
- Service (Operational, Information and Application service)

Graphic Example from NAF:

Service	Interface	I/O	Operation	Datatypes
Situation Information Consolidator	Situation Information Submission	I	setAreaOfInterest	Geographic Location
			submitLocationOfResource	Resource, Geographic Location, Track
	Situation Information Request	I	requestPictureForArea	Geographic Location, Situation Picture
			requestLocationOfResource	Resource, Geographic Location
	Store	O	storeInformation	SituationInfo Package
	Retrieve	O	retrieveInformation	Geographic Location, Time, SituationInfo Package
Situation Information	Store	I	storeInformation	SituationInfo Package

Figure 4-18. Example of a service interface definition

SOV-3: Services to Operational Activities Mapping ***(Duplication of SvcV-5 Operational Activity to Services Traceability Matrix)***

Purpose: The SOV-3 provides traceability by illustrating which services support which operational activities.

Uses: The SOV-3 shows which operational activities are supported by which services through the use of a mapping matrix. This sub view is similar to other mapping matrices in the DoDAF. Refer to CV-5 (Capabilities x Organizational

Development), CV-6 (Capabilities x Operational Activities), CV-7 (Capabilities x Services), SV-5 (System functions x Operational activities), and SV-12 (Systems x Services). Together, with these mapping sub views, SOV-3 forms a line of reasoning that interrelates capabilities, operational activities, services and systems, through the use of traceability links.

Data Objects: The data in an SOV-3 may include:

- Process
- Service (Operational, Information and Application service)

SOV-4: Service Orchestration (Duplication of SvcV-10c Services Event-Trace Description)

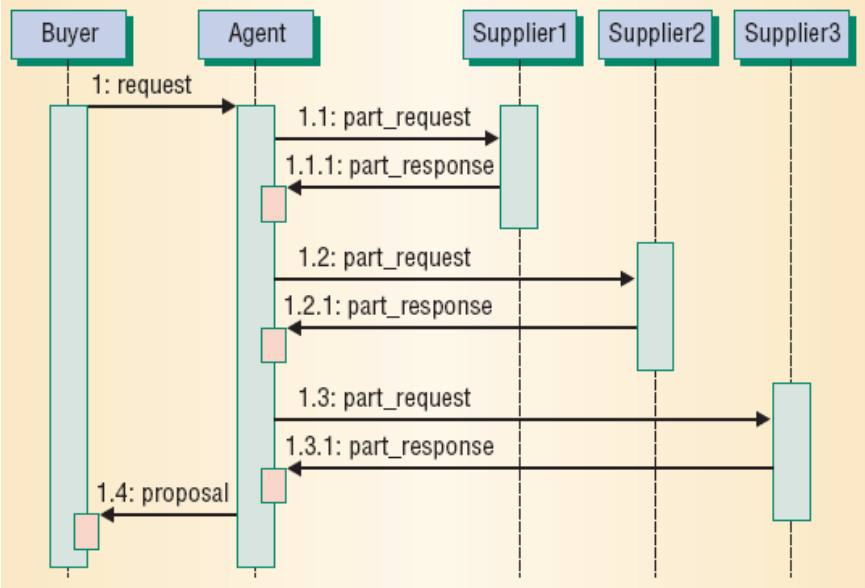
Purpose: to identify and describe how services in general, and web services in particular, are utilized in the execution of operational activities, and how services are used, in conjunction, to support operational processes.

Uses: A service orchestration, in general, is a set of services, used in conjunction, capable of satisfying certain operational objectives that cannot be achieved by any of the services alone. At the construction level, a web service orchestration is the set of interactions between web services at message level. Depending on purpose, it may not be enough to only determine which web services are used. It may also be necessary to resolve timing issues, semantic misunderstandings, and quality of service discrepancies, which may appear at the construction level when web services interact. On a construction level the orchestration of web services, requires the various composing services to collaborate in a controlled (orchestrated) manner.

Data Objects: The data in an SOV-4 may include:

- Performer
- Activity
- Service (Operational, Information and Application service)
- portion of a Service
- Service Orchestration, Interface, ….

Graphic Example from NAF:



SOV-5: Service Behavior ***(Duplication of SvcV-10c Services Event-Trace Description)***

Purpose: The SOV-5 specifies the function and behavior of individual services.

Uses: Behavioral views under SOV-5 include detailed activity models as well as state charts and sequence diagrams to model the sequencing and timing of interactions between services. The products of this sub view are similar to the behavioral sub views of OV-6 Operational Activity Sequence & Timing Description, and SV-10 Systems Rules, Sequence & Timing Description. The approach taken in OV-6 and SV-10 is applied to the SOV-5 sub view to offer a behavioral view on the concept of services.

Data Objects: The data in an SOV-5 can include:

- Consuming Performer
- Service (Application service)
- Component
- Component collaboration

Graphic Example from NAF:

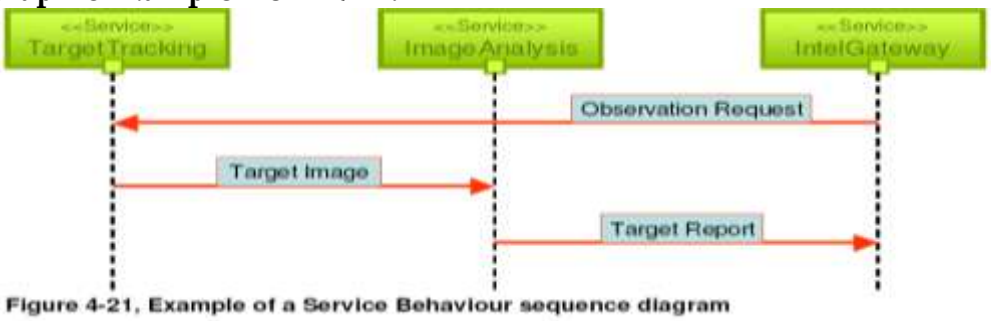


Figure 4-21, Example of a Service Behaviour sequence diagram

Appendices

Appendix A: List of DoDAF V1.5 Products

DoDAF Product Acronym	DoDAF Product Full Name
All Views (AVs)	
AV-1	Overview and Summary
AV-2	Integrated Dictionary
Operational Views (OVs)	
OV-1	High-level Operational Concept Graphic
OV-2	Operational Node Connectivity Description
OV-3	Operational Information Exchange Matrix
OV-4	Organizational Relationships Chart
OV-5	Operational Activity Model
OV-5 Activity Model	OV-5 Activity Model
OV-5 Node Tree	OV-5 Node Tree
OV-6a	Operational Rules Model
OV-6b	Operational State Transition Description
OV-6c	Operational Event/Trace Description
OV-7	Logical Data Model
System Views (SVs)	
SV-1	System Interface Description
SV-2	Systems Communications Description
SV-3	Systems- Systems Matrix
SV-4a	System Functionality Description
SV-4b	Services Functionality Description
SV-5a	Operational Activity System Functions Traceability Matrix
SV-5b	Operational Activity to Systems Traceability Matrix
SV-5c	Operational Activity to Service Traceability Matrix
SV-6	System Data Exchange Matrix
SV-7	Systems Performance Parameters Matrix
SV-8	System Evolution Description
SV-9	Systems Technology Forecast
SV-10a	Systems Rules Model
SV-10b	System State Transition Description
SV-10c	Systems Event/Trace Description
SV-11	Physical Schema

DoDAF Product Acronym	DoDAF Product Full Name
Technical Views (TVs)	
TV1	Technical Standards Profile
TV-2	Technical Standards Forecast

Appendix B: List of Participating Organizations and Projects by Organization Type

Organization Name	Target Audience
Defense Activities, Defense Agencies, and OSD Organizations	
BTA	BEA
DISA	NLCC Management Office Capability-based Decision Support Environment (C-DSE)
DoD Information Technology Standards Registry (DAU)	DISR
NSA	NSA/CSS Enterprise Architecture
OSD-NIS (A&S)	GIG Arch V2.0
OSD P&R P&R IM	HRM Architecture
Combatant Commands (COCOMs)	
USJFCOM	JCAS Mission Capability
	JNTC
	JSBA
	Tactical Architecture - Brigade Combat Teams
USPACOM	Guam Joint Region Architecture
USSOCOM	?
USSTRATCOM	STRATCOM Enterprise Architecture
	Vision
Contractors	
Booz Allen Hamilton	Many throughout PEO CUI
MITRE	Medical Education & Training Center (METC)/Joint MEAT Transformation (BRAC Plus)
Northrop Grumman	HURT
WBS Consulting	40+ JCIDS archs (F-2,B-2,E-2,E-6,MRAP,JLTV,etc)
Information Not Provided	
N/A	?
Services	
Air Force	Command and Control Constellation (C2C) Systems Segment
	DoDITS Cross Domain Enterprise
	Space Radar Integrated Architecture
	TSAT System Archictecture

Organization Name	Target Audience
	USAF Space & C4ISR CONOPS Architecture (As-Is & To-Be)
Army	Architecture Integration
	Architecture Team
	DoDAF v 2 UpDate Data Technical Working Group
	ISA Capability Baseline Architecture – Battlespace Awareness Domain
	JIEDDO Baseline
	The Army LandWar Net Netops Architecture (LNA)
	USFK EA/KORCOM Transformation
Marine Corps	USMC Installations & Environment
	USMC PORs (Program of Records)
Navy	Investigative Focused Architecture
	MPTE
	Navy ERP
	NCIS Investigative Focused Architecture

Appendix C: DoDAF Product Development Frequency – Most Commonly Developed Products

Development Frequency	DoDAF Product	Project Count
92%	**OV-1**	**35**
84%	**AV-1**	**32**
82%	**OV-5 Node Tree**	**31**
79%	**AV-2**	**30**
76%	**OV-2**	**29**
71%	**OV-5 Activity Model**	**27**
71%	**SV-1**	**27**
68%	**OV-4**	**26**
66%	**OV-3**	**25**
66%	**SV-2**	**25**
63%	**SV-5a**	**24**
58%	**OV-6c**	**22**
58%	**TV1**	**22**
55%	**SV-4a**	**21**
47%	SV-6	18
39%	OV-7	15
37%	TV-2	14
32%	OV-6a	12
29%	Other	11
29%	SV-3	11
29%	SV-5b	11
26%	SV-4b	10
24%	OV-6b	9
24%	SV-10c	9
24%	SV-5c	9
24%	SV-8	9
18%	SV-11	7
11%	SV-10a	4
11%	SV-9	4
8%	SV-10b	3
5%	SV-7	2

Appendix D: DoDAF Product Development Frequency by Service

DoDAF V1.5 products	Air Force	Army	Marine Corps	Navy
AV-1	60%	71%	100%	100%
AV-2	80%	71%	100%	50%
Other	0%	14%	33%	25%
OV-1	80%	86%	100%	100%
OV-2	40%	86%	100%	50%
OV-3	40%	71%	67%	25%
OV-4	40%	86%	100%	50%
OV-5 Activity Model	40%	86%	67%	75%
OV-5 Node Tree	40%	86%	100%	100%
OV-6a	0%	57%	0%	75%
OV-6b	0%	29%	0%	75%
OV-6c	20%	43%	67%	100%
OV-7	20%	43%	67%	50%
SV-1	80%	86%	33%	75%
SV-10a	0%	14%	0%	50%
SV-10b	0%	0%	0%	50%
SV-10c	20%	0%	67%	50%
SV-11	0%	0%	67%	25%
SV-2	80%	43%	100%	100%
SV-3	20%	43%	0%	25%
SV-4a	60%	57%	67%	50%
SV-4b	40%	43%	0%	50%
SV-5a	80%	57%	67%	50%
SV-5b	40%	29%	0%	50%
SV-5c	40%	14%	0%	50%
SV-6	60%	29%	67%	50%
SV-7	0%	0%	0%	100%
SV-8	0%	0%	100%	25%
SV-9	0%	14%	0%	0%
TV1	40%	43%	67%	50%
TV-2	40%	29%	67%	25%

Appendix E: DoDAF Product Development Frequency by Service and Product

Air Force		Army		Marine Corps		Navy	
Product	**Freq.**	**Product**	**Freq.**	**Product**	**Freq.**	**Product**	**Freq.**
AV-2	**80%**	**OV-1**	**86%**	**AV-1**	**100%**	**AV-1**	**100%**
OV-1	**80%**	**OV-2**	**86%**	**AV-2**	**100%**	**OV-1**	**100%**
SV-1	**80%**	**OV-4**	**86%**	**OV-1**	**100%**	**OV-5 Node Tree**	**100%**
SV-2	**80%**	**OV-5 Activity Model**	**86%**	**OV-2**	**100%**	**OV-6c**	**100%**
SV-5a	**80%**	**OV-5 Node Tree**	**86%**	**OV-4**	**100%**	**SV-2**	**100%**
AV-1	**60%**	**SV-1**	**86%**	**OV-5 Node Tree**	**100%**	**SV-7**	**100%**
SV-4a	**60%**	**AV-1**	**71%**	**SV-2**	**100%**	**OV-5 Activity Model**	**75%**
SV-6	**60%**	**AV-2**	**71%**	**SV-8**	**100%**	**OV-6a**	**75%**
OV-2	40%	**OV-3**	**71%**	**OV-3**	**67%**	**OV-6b**	**75%**
OV-3	40%	**OV-6a**	**57%**	**OV-5 Activity Model**	**67%**	**SV-1**	**75%**
OV-4	40%	**SV-4a**	**57%**	**OV-6c**	**67%**	**AV-2**	**50%**
OV-5 Activity Model	40%	**SV-5a**	**57%**	**OV-7**	**67%**	**OV-2**	**50%**
OV-5 Node Tree	40%	OV-6c	43%	**SV-10c**	**67%**	**OV-4**	**50%**
SV-4b	40%	OV-7	43%	**SV-11**	**67%**	**OV-7**	**50%**
SV-5b	40%	SV-2	43%	**SV-4a**	**67%**	**SV-10a**	**50%**
SV-5c	40%	SV-3	43%	**SV-5a**	**67%**	**SV-10b**	**50%**
TV1	40%	SV-4b	43%	**SV-6**	**67%**	**SV-10c**	**50%**
TV-2	40%	TV1	43%	**TV1**	**67%**	**SV-4a**	**50%**
OV-6c	20%	OV-6b	29%	**TV-2**	**67%**	**SV-4b**	**50%**
OV-7	20%	SV-5b	29%	Other	33%	**SV-5a**	**50%**

Air Force		Army		Marine Corps		Navy	
Product	**Freq.**	**Product**	**Freq.**	**Product**	**Freq.**	**Product**	**Freq.**
SV-10c	20%	SV-6	29%	SV-1	33%	**SV-5b**	**50%**
SV-3	20%	TV-2	29%	OV-6a	0%	**SV-5c**	**50%**
Other	0%	Other	14%	OV-6b	0%	**SV-6**	**50%**
OV-6a	0%	SV-10a	14%	SV-10a	0%	**TV1**	**50%**
OV-6b	0%	SV-5c	14%	SV-10b	0%	Other	25%
SV-10a	0%	SV-9	14%	SV-3	0%	OV-3	25%
SV-10b	0%	SV-10b	0%	SV-4b	0%	SV-11	25%
SV-11	0%	SV-10c	0%	SV-5b	0%	SV-3	25%
SV-7	0%	SV-11	0%	SV-5c	0%	SV-8	25%
SV-8	0%	SV-7	0%	SV-7	0%	TV-2	25%
SV-9	0%	SV-8	0%	SV-9	0%	SV-9	0%

Appendix F: DoDAF Product Development Frequency – Least Frequently Developed Products

Development Frequency	DoDAF Product	Project Count
95%	**SV-7**	**36**
92%	**SV-10b**	**35**
89%	**SV-10a**	**34**
89%	**SV-9**	**34**
82%	**SV-11**	**31**
76%	**OV-6b**	**29**
76%	**SV-10c**	**29**
76%	**SV-5c**	**29**
76%	**SV-8**	**29**
74%	**SV-4b**	**28**
71%	**Other**	**27**
71%	**SV-3**	**27**
71%	**SV-5b**	**27**
68%	**OV-6a**	**26**
63%	**TV-2**	**24**
61%	**OV-7**	**23**
53%	**SV-6**	**20**
45%	SV-4a	17
42%	OV-6c	16
42%	TV1	16
37%	SV-5a	14
34%	OV-3	13
34%	SV-2	13
32%	OV-4	12
29%	OV-5 Activity Model	11
29%	SV-1	11
24%	OV-2	9
21%	AV-2	8
18%	OV-5 Node Tree	7
16%	AV-1	6
8%	OV-1	3

Appendix G: "Other Product" Development Purpose/Source of Requirement

"Other Product" Development Purpose/Source of Requirement
DoDAF v 2 CMG Directive
(1) Facilities - Sites and floor plans; (2) OV-4 to OV-5 Tree Mapping - OP Roles and Responsibilities; (3) Transformation Plans (Gantt, portfolios); (4) Transformation Performance Reports (scorecards and dashboards)
Achieve Joint Information Environment attributes
BPMN - For OV-6a, OV-6b, OV-6c, SV-10a, SV-10b, and SV-10c. Still have separate OV-6a and SV-10a for non-graphical rules.
Hybrid SOA Model, SVS-1, SVS-5, task explanation (available upon request only)
Integrated Video (IV)
Matrix mapping Operational Activities (OV-5) to Systems (SV-1)
OV/SV cross
OV-6c/0V-5 type views to drive modeling assessments
TV1b - Organizational Standards
UCP, DoDD 0-51003, etc - Hybrid views (Combo OV-5 Node Tree, OV-2, SV-1)

References

1. http://www.modaf.uk.org

2. NATO Architecture Framework (NAF), Version 3, Chapter 4, Architecture Views and Sub views.

3. The Open Group Architecture Framework (TOGAF), Version 8.1.1, Enterprise Edition.